

CENTRAL FAX CENTER

Applicant(s): Antonius Henricus Maria Raaijmakers et al.

Serial No.: 09/745,914

NOV 18 2004

For: ELECTRO-OPTICAL DEVICE HAVING AN ITO LAYER, A SiN LAYER
AND AN INTERMEDIATE SILICON OXIDE LAYER

Filed: December 22, 2000

Examiner: Chung, David Y.

Group Art Unit: 2871

Attorney Docket No.: PHN 17,819

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) An electro-optical device having at least one photosensitive element and at least one switching element with at least one layer of amorphous silicon on which an ITO (indium tin oxide) layer is provided, said at least one photosensitive element and said at least one switching element being also provided with at least one SiN layer near said ITO layer, wherein said ITO layer is deposited prior to said SiN layer and an intermediate layer of silicon oxide is provided between said ITO layer and said SiN layer ~~in such a manner that said at least one switching element is completely shielded during manufacture, and wherein a top contact of said photosensitive element is made so that light can enter through said ITO layer.~~

2. (previously presented) The electro-optical device of claim 1, wherein the electro-optical device is a fingerprint sensor.

4. (currently amended) A method for improving the optical and electrical properties of an ITO layer and thereby the quality of an electro-optical device, comprising the steps of:

providing an electro-optical device having at least one photosensitive element and at least one switching element with at least one layer of amorphous silicon;

depositing a doped ITO layer on said at least one layer of amorphous silicon said ITO layer is being deposited prior to ~~said a~~ SiN layer; and

providing an intermediate layer of silicon oxide between said doped ITO layer and said SiN layer ~~provided by means of chemical vapor deposition, said silicon oxide provided in such a~~

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~~manner that said at least one switching element is completely shielded during manufacture, and~~

making a top contact of said photosensitive element so that light can enter through said ITO layer.

5. (previously presented) The method of claim 4, wherein said intermediate layer of silicon oxide is provided prior to said step of providing said SiN layer.

6. (previously presented) The method of claim 5, wherein said SiN layer is provided by means of chemical vapor deposition so that said doped ITO layer is protected during manufacture.